THE COVEY HEADQUARTERS

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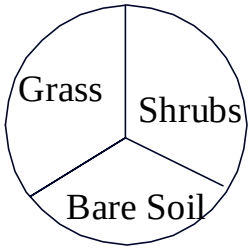
This newsletter is aimed at cooperators and sportspeople in Missouri to provide information on restoring quail. This is a joint effort of the Missouri Department of Conservation, USDA-Natural Resources Conservation Service, and University of Missouri Extension. If you would like to be removed from this mailing list or have suggestions for future articles please contact jeff.powelson@mdc.mo.gov or 816-232-6555 x122 or write to the address shown.



The name of this newsletter is taken from an old concept.....that a quail covey operates from a headquarters (shrubby cover). If the rest of the covey's habitat needs are nearby, a covey should be present. We are encouraging landowners to manage their quail habitat according to this concept. Use **shrubs** as the cornerstone for your quail management efforts. Manage for a **diverse grass, broadleaf weed and legume mixture and provide bare ground** with row crops, food plots or light disking **right next to** the shrubby area.

REVIEW OF MISSOURI'S QUAIL HUNTING SEASON DATES

Tom Dailey, Resource Scientist, Columbia, MO and Aaron P. Jeffries, Private Land Program Supervisor, Jefferson City, MO

Ever wonder why the opening and closing dates of quail hunting seasons vary so much from state-to-state, or why Missouri's season is always November 1 to January 15? In nearby states opening dates range from late October to late November, and seasons close from mid December to the end of February. With each game species and hunting season, the Missouri Department of Conservation must weigh sound wildlife management, scientific research, hunter satisfaction, and the general public's perceptions when determining appropriate season dates and limits.

In 2005, the Department conducted a thorough review of Missouri's quail season. Here's a summary of the review and justification for the current season structure. A similar article was published in the Fall 2006 issue of the Covey Headquarter Newsletter.

- **Era of annual season review:** From 1950-1981, Missouri's quail season opened on November 10th, and closed between December 15th and January 15th, with the longest season being 66 days. Quail hunting regulations were set each year based on population indices, and most often the season ended in December based on research in Illinois that showed hunting losses in January added to natural mortality and risked a decline in breeder numbers. Despite the annual attention to hunting regulations, quail numbers continued to decline.
- **Focus on habitat:** In 1982, new MDC quail biologist Rich Cannon recommended the hunting season that we currently use, November 1 to January 15. In 1987 this season structure was placed in the Missouri Conservation Commission Wildlife Code. Biologists reasoned that the publics' focus should be shifted away from regulations as a way to restore quail, and toward habitat restoration and management. Today, quail habitat restoration and management are high priorities for the Department and conservation partners, and the birds are responding, albeit in limited fashion.
- **Balancing biology and hunting demand**: Expanding the season from the pre-1980s length of 66 days to the new structure (earlier opening of November 1st) with 76 days caused much concern. MDC quail biologist Cannon recognized this in a summary of the regulation setting process that was published in 1986 in an MDC publication, *Missouri Quail: At the Crossroads of the Future* (http://mdc.mo.gov/landown/wild/quail/). In the section titled *Seeking a Balance*, Cannon referred to the January 15th closure as a compromise between recreational demand for a longer season, and the quails' sensitivity to over-harvest as identified in the Illinois study.

- **Recent research:** Recent research in Kansas, Texas and North Carolina reiterated the finding from Illinois that quail are vulnerable to over-harvest in January, February and March. The timing of harvest is at the crux of the quails' sensitivity. Kansas researchers stated it this way: "Managers should recognize that harvest can significantly lower spring northern bobwhite breeding densities." and that "one way to reduce harvest effects is to assure that harvest timing occurs in early winter and hunting season length is minimized."
- **Timing of harvest is critical:** The effect of timing of harvest is based partly on the phenomena that high-producing small game populations face a 'bottle-neck' in winter as weather is severe and cover and food are reduced, resulting in increased natural mortality (predation, hypothermia, starvation, etc.), and subsequent rapid decline in abundance. The result of this is that harvest can have less effect on breeder abundance if it occurs prior to major periods of natural mortality. *The practical result is that 1 quail harvested in early November does not necessarily result in 1 less breeder the next spring*. On the other hand, as natural mortality increases during winter, eventually 1 quail harvested *does* result in 1 less breeder. This is especially true in late January and February when other factors such as food and cover may be limited. In other words, by hunting in late January or February, you could be harvesting quail that would have made it to spring to breed.
- **Winter stress:** In addition to the above consequences, hunting in January is potentially more damaging because quail are more vulnerable in winter's diminished cover, and birds not killed, but harassed, could suffer higher predation and energy losses, and potentially higher mortality.
- **Missouri's quail vulnerable in January:** MDC's study of quail on farmland in northeast Missouri in the 1990s found that natural mortality spiked in January—predators and winter weather took a heavy toll with the percent of quail killed jumping from 17% in December to 29% in January. This pattern fit Illinois and Kansas observations of increased vulnerability in January.
- **Today's quail and today's hunter:** Missouri's quail hunter numbers have plummeted from more than a 100,000 in the 1980s to 22,000 in 2008. Couldn't the quail population handle a longer season with so few hunters? Unfortunately today's quail population is but a remnant of the past with quail disappeared or at unhuntable numbers on most of the landscape and the huntable populations scattered around in small pockets. The fragmentation of quail habitat and populations translates to an increased chance of local extinction. And although there are fewer quail hunters, they are efficient and persistent, and have the potential to push local populations to extinction. Unlike the old days, the chances are slim that neighboring quail will move in and reestablish a thriving population.
- **A new closing date?** Based on the scarcity of quail some have argued for a December closure, or other restrictions, such as custom regulations for counties, as is done in South Carolina. Of course this would get us back into the mode of working on saving what we have left, instead of focusing on improving conditions and increasing quail numbers. Further, most of the improvements made for quail are being spearheaded by hunters, so further restrictions in hunting would likely result in fewer hunters, less support for habitat restoration, and consequently, *fewer* quail. So, almost 2 decades later we arrive at the same conclusion drawn in 1986: the January 15 closing date is a compromise between biology and sport. Extending the season into late January or February could potentially impact breeding numbers. Further, in 2002 the state embarked on a massive quail restoration program because of the dwindling quail population—to liberalize hunting now would send a mixed message. Fortunately, there are numerous examples in recent years where public land managers and private landowners have restored and managed habitat for bobwhites with an incredible response. For example, the November 2008 issue of the Missouri Conservationist (http://www.mdc.mo.gov/conmag/2008/11/30.htm) featured an outstanding story by Jim Low on how Jeff Churan has turned his property in a quail haven. As a result of Jeff's dedicated work, hunters averaged one covey every 24 minutes during the 2005-2006 season. On one hunt, they moved nine coveys in 3.5 hours. Despite all time low densities, success stories from around Missouri have shown that bobwhites will respond to active habitat management.
- **A new opening date?** No, with a biological constraint on the closure, we are forced to look to fall for increased recreational opportunity. Biologically, this is easy because at this time harvest has little, if any, effect on breeder abundance. Many of the quail killed by hunters would have died anyway because of predation, malnutrition, etc. Biologists have known since the 1940s that good management demands that harvest by the gun come as close to the reproductive season as reasonably possible. With most of Missouri's quail production finished during August-September, this is exactly what the November 1 opener does.

In conclusion, the future of quail hunting is more dependent on hunters focusing on habitat improvement than getting side-tracked on hunting regulations, predator control and pen-raised quail. **The future of quail hunting in Missouri is in the balance—are you contributing?** The above summary covers only a portion of the review—for the complete review go to http://mdc4.mdc.mo.gov/Documents/11098.pdf

Mid-contract management improves grassland habitat conditions for northern bobwhite broods in Conservation Reserve Program fields

Douglas C. Osborne, Cooperative Wildlife Research Laboratory, Southern Illinois University Carbondale

For more than 20 years the Conservation Reserve Program has provided landowners with financial and technical assistance to retire highly erodible cropland from production and establish permanent grass cover by offering 10-15 year contracts. The addition of these grassland habitats interspersed among agricultural crop fields can benefit many species of grassland wildlife including northern bobwhite.

Bobwhites use a variety of grassland habitats during the nesting and brood-rearing season. They typically nest in areas of moderately dense vegetation in close proximity to areas with a thin understory of tall, diverse vegetation and bare ground. Thin understory and tall vegetation with sufficient bare ground provides optimal foraging habitat for bobwhite chicks in search of protein-rich insects while protecting them from aerial predators and extreme weather conditions. Unfortunately as CRP plantings age, the vegetation becomes dense and the bare ground diminishes. Habitats in these conditions provide poor foraging conditions for bobwhite chicks as it is difficult for them to maneuver through the vegetation while in search of food items.

In 2004, the U.S. Department of Agriculture authorized the mid-contract management program to restore and maintain suitable habitat conditions in aging CRP fields for grassland wildlife such as the bobwhite. Mid-contract management is required on CRP contract established after the 26th signup, whereas optional amendments are provided for mid-contract management in CRP fields enrolled prior to this date.

In an effort to evaluate the effects of mid-contract management on the foraging efficiency of bobwhite chicks, we conducted experiments using human imprinting techniques and foraging trials to test whether mid-contract management practices in Illinois would increase insect consumption rate by bobwhite chicks. Our experiment was conducted during 2006-2008 and we tested 3 mid-contract management practices including strip disking, herbicide spraying, and herbicide spraying followed by legume interseeding. We did not test prescribed fire, an important mid-contract management practice in Missouri and other states.

After foraging trials and laboratory assessment of insects consumed were conducted, we determined that bobwhite chicks consumed on average the same amount of insects in fields treated with disking, herbicide, and herbicide with interseeding during the first summer after the treatments were implemented. However, during the second summer after treatment, bobwhite chicks consumed more insects in sprayed and sprayed with interseeded fields than in disked or control fields. In general, spray and spray with interseeded treatments provided better foraging conditions for bobwhite chicks for an extended period of time, whereas disking improved habitat conditions for only 1 growing season.

Mid-contract management is an effective tool for restoring brood-rearing habitat conditions in aging CRP fields. However, not all practices are equally effective and we suggest for Illinois using herbicide and herbicide followed by interseeding to restore and maintain quality bobwhite habitat conditions in CRP fields. Herbicide followed by interseeding may be the best mid-contract management practice because it also provides a food source in legume seeds for bobwhite coveys during the winter months, as they rely on agricultural grains and other seeds from plants including lespedeza and ragweed.

The CRP is the largest governmental program effecting the quality and quantity of grassland wildlife habitat in the United States. It is essential for wildlife managers and agricultural producers to work together to maximize the benefits of such conservation programs. We encourage those with land enrolled in the CRP to inquire with their county Farm Service Agency office of opportunity for mid-contract management. Bobwhite quail, once an abundant gamebird on farms throughout the Midwest, are still declining in abundance. We need your help to improve habitat conditions so that future generations can continue to enjoy the bobwhite quail.

Quail Focus Areas – Targeting private land habitat work

MDC is targeting habitat restoration on two fronts. Quail Emphasis Areas (QEAs) include 19 Conservation Areas where quail management is the focus. Quail Focus Areas (QFAs) are larger and primarily target private land. QFAs were selected in areas where landowners were already managing for quail, near conservation

areas with good quail habitat, and/or where conservation partners have expressed an interest in quail management. Today, there are 34 QFAs located throughout the state. Many focus areas are around 30,000 acres in size, but some are even larger because of wide-spread landowner interest and success. Within focus areas, staff have been working with landowners to improve quail habitat by providing technical and financial assistance. Landowners and conservation partners are also spreading the news about Quail Focus Areas and the benefits of habitat management. Success will come one farm at a time. Every little bit helps! Listed below are highlights of two Quail Focus Areas.

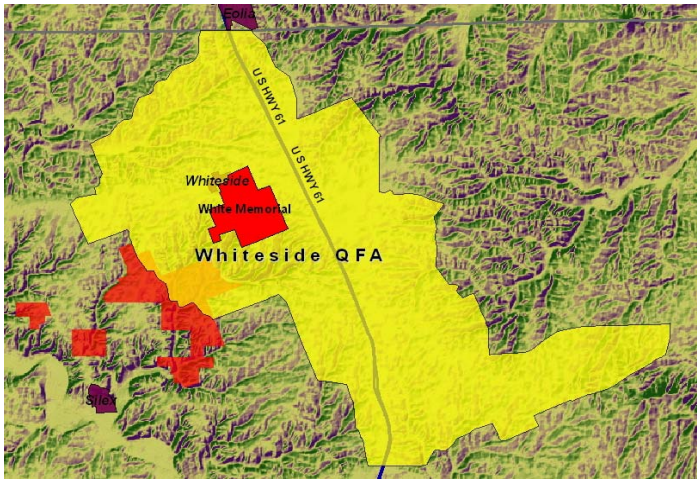
WRIGHT COUNTY QUAIL FOCUS AREA

Region: Ozark
County: Wright
Size: 24,732 acres
Person to Contact: Lesly Holt, Private Land Conservationist (417) 967-2028, ext. 129 or Keith Wollard, Conservation Agent (417) 741-6681

Focus Area Facts: Located in northwest Wright County, this focus area was started in 2004. Landowners in the focus area have been converting fescue fields to native warm-season grasses and wildflowers, conducting prescribed burns and planting food plots. They are also restoring natural communities such as savanna and open woodlands that were once common throughout the Ozarks. These unique natural communities provide good quail habitat. A few landowners are also working with MDC staff to conduct fall whistle count surveys to monitor quail responses to their management efforts. Conservation partners like the Wright County Soil and Water Conservation District, National Wild Turkey Federation and Quail Forever have played a critical role in promoting the focus area.

WHITESIDE QUAIL FOCUS AREA

Region: Saint Louis
County: Lincoln
Size: 22,456 acres
Person to Contact: Jeff Esely, Private Land Conservationist (636) 528-4877, ext. 111



Focus Area Facts: Located around the White Memorial Conservation Area, a designated Quail Emphasis Area, is this emerging focus area. Department staff have been working with a few landowners in the focus area but have recently hosted field days to attract others. Landowners are working to convert fescue fields to native warm-season grasses and wildflowers, edge feather and establish CRP field borders.

Regulation Changes Provide More Quail Hunting Opportunities in 2009

During the 2009 quail season, upland bird hunters will notice new hunting regulations on a few conservation areas. Last year, the Conservation Commission approved quail hunting regulations that will simplify quail hunting rules and provide a quality hunting experience on designated conservation areas around the state. The proposal was reviewed by several Department biologists, the Regulations Committee, and the Missouri Quail and Grassland Bird Leadership Council which is composed of hunting and farming organizations such as Quail Forever, Quail Unlimited, Missouri Soybean Association and Missouri Cattlemen's Association.

Most notably has been the elimination of the 1:00 PM closure on a few department areas. On these areas quail hunters can now pursue quail all day during the prescribed season. The 1:00 PM closure was implemented in the late 1980s to reduce hunting pressure and to provide time for coveys to regroup and feed in the evening. The 1:00 PM closure was dropped because research didn't support keeping it. In the late 1990s, Department biologists conducted a study comparing restricted hunting regulations to statewide regulations on the Blind Pony Lake Conservation Area in Saline County. The study divided the area in half with part of the area open to statewide quail hunting regulations and the other half only open to restricted hunting regulations. Interestingly, at the end of the study the researchers found no difference in quail densities or the physical condition of birds between the two sites.

Researchers also found that restricted hunting, like the 1:00 PM closure, didn't improve winter survival. In fact, many of the birds still died from natural causes over the winter. Biologists also noticed that after 1:00 PM, quail were still being "pressured" by other legal activities on the conservation area. For example, coveys were still flushed by rabbit hunters and other area users. Other research projects have shown that quail wise up to hunting pressure and often take drastic steps to avoid hunters. For example, in one research project coveys were documented roosting on the conservation area only to fly to private land to spend the rest of the day. Other studies showed that coveys started to move away from hunters and researchers when they were more than 300 yards away. Somehow the birds knew they were coming!

Additionally in 2009, eight conservation areas will require quail hunters to have a prescribed hunting permit and a valid area daily tag to quail hunt. The free permit and tag will be available at the area headquarters or parking lots. At the end of the day, hunters will need to return the hunting card to the area headquarters or place the card in a drop box in the parking lot. The daily hunting tag will provide vital information for biologists on the amount of hunting pressure, bird harvest and hunting success on the conservation area. This information will be used in the future to provide better hunting opportunities on conservation lands.

Two conservation areas will also offer managed quail hunting opportunities. The Dan and Maureen Cover Prairie Conservation Area (Howell County) and Carrick W. Davidson – Robert G. Paris Wildlife Area (Howell County) will only allow quail hunting through a random draw that will be completed each fall. Information on how to apply follows this article. The purpose of the managed quail hunt system is to provide a high quality quail hunting experience on areas with good quail numbers.

Here is a summary of the new quail hunting regulations approved by the Conservation Commission. Effective March 1, 2009 the *Wildlife Code of Missouri* has established the following provisions for quail hunting on the listed Department areas. Quail hunting is permitted under statewide regulations on most other conservation areas except for quail hunting is prohibited on a few department areas. Please refer to the *Wildlife Code of Missouri* (3 CSR 10-7.415 and 3 CSR 10-11.184) for details on Missouri's quail seasons and regulations.

- **Quail may be taken only by holders of the prescribed hunting permit and a valid area daily hunting tag, and hunters must check out immediately after the close of their hunting trip on the following conservation areas:**

  Bunch Hollow Conservation Area, Crowleys Ridge Conservation Area, Davisdale Conservation Area, Maintz Wildlife Preserve, and Emmett and Leah Seat Memorial Conservation Area
- **Quail hunting is only permitted through December 15 on the following conservation areas:**

  Dr. O.E and Eloise Sloan Conservation Area and Whetstone Creek Conservation Area
- **Quail hunting is permitted only through December 15 by holders of the prescribed hunting permit and a valid area daily hunting tag, and hunters must check out immediately after the close of their hunting trip on the following department areas:**

  Bois D'Arc Conservation Area, Robert E. Talbot Conservation Area and White River Trace Conservation Area

These changes will help simplify quail hunting regulations on conservation lands while providing additional hunting opportunities for Missouri quail hunters. If you get the chance, get out and explore one of these conservation areas this fall. To learn more about the Department's Quail Emphasis Areas and habitat management check out www.mdc.mo.gov/hunt/gamebird/qea.htm.

Experience a Quality Quail Hunt on Public Land

Special quail hunts set for Cover Prairie C.A. and Davidson-Paris W. A.

To improve your chance of finding quail on public land, the Missouri Department of Conservation restricts hunting pressure on select Conservation Areas. On two areas in Howell County, public use is limited to a handful of days, and only one hunting party each of those days. MDC is accepting applications for special quail hunts on the Dan and Maureen Cover Prairie Conservation Area and the Carrick W. Davidson- Robert G. Paris Wildlife Area, both near West Plains. There will be 18 hunts on Cover Prairie C.A. and 8 hunts on Davidson-Paris W.A. Each successful applicant will be allowed to take three other hunters, and they will have the area to themselves. Each party will be allowed to take four quail. To apply for these special hunts, contact: Missouri Department of Conservation, Special Quail Hunts, 551 Joe Jones Blvd., West Plains, MO 65775 or call 417-256-7161. All applicants must include the area on which they wish to hunt, the applicants name, permanent mailing address, phone number and the names of no more than three additional people who will be in the hunting party. No person's name may be listed on more than two permits. Applications will be accepted Sept. 1 thru Sept. 30. Successful applicants will be notified by Oct. 15.

Think like a Squirrel

The last two springs in Missouri have been difficult in terms of upland wildlife management. Late winter weather, frequent rains, and soggy conditions have not been conducive to springtime field work. What can a wildlife manager do to avoid the late rush of springtime work? The answer is fall fieldwork. Usually fall weather is dry enough to allow fieldwork such as light disking, food plot preparation, firebreak installation, and shrub planting preparation. Erosion is sometimes a concern with fall tillage and should be on large fields; however most upland management is done on a small scale and with some common sense, erosion can be avoided completely. As always keep your tilled areas on the contour and do not till steep slopes. Mowing is often required before disking to remove tall vegetation that can clog smaller disks. Prepare your equipment during the summer and be ready to go when cooler fall temperatures signal hunting seasons are around the corner.

Weedy bare ground is one of the most neglected components of upland bird habitat; however it is arguably the most important. Bobwhite chicks need protected open areas for bugging and roosting. Disking is a great way to provide weedy bare ground and enhance the plant diversity of a field. Disking is basically the practice of pulling a disc heavy enough to cut the sod across a field to break up the grass stand and stimulate annuals to germinate. The tilled strips should expose 50-75% bare ground and be separated by a strip of undisturbed vegetation and kept on the contour. Disking can be done on CRP from July 16-December 31. The disked strips basically act as a poor man's food plot because they provide excellent brood rearing areas in the summer and foraging habitat in the fall and winter. Tilled strips will often grow up into great quail plants like ragweed, foxtail, croton, and partridge pea. Disked strips can be installed in cool-season grasses like fescue and brome or in native grass stands like switchgrass and big bluestem. In either situation, the grasses will cover up the tilled lines in 1-2 growing seasons and the strips will need to be reapplied. A strip disking rotation is a great way to "convert" a sod-bound grass field into a more diverse habitat. Legumes like annual lespedeza, partridge pea or other plants can be overseeded into disked strips to further diversify a field. Remember, more plant diversity means more food plants for wildlife.

Shrub plantings are a good way to add permanent shrubby cover to a farm, but good preparation is necessary for success. When you order your trees this fall, go ahead and properly prepare your planting area as well. Spray or till your shrub plots in the fall so all you need to do in the spring is pull in and start planting shrubs. After that, you can concentrate on weed control to make sure those shrubs have a chance. With some timely rains and good preparation, most shrub plantings will thrive.

Food plots are something most people don't think about until spring. However, food plot preparation can be done anytime you have time. Fall is a great season to prepare your future food plots. You can spray or till new food plots this fall and they will be ready to go in the spring; perhaps only requiring a quick top dressing for weed control. If done early, food plots can be prepped and planted to green browse that will be ready for hunting season. Both grain plots and green browse plots are ok in CRP, just be ready to disturb them at least every other year.

Fall is a great time to think about prescribed burning. Burn plans can be developed, firebreaks can be prepared, and actual burns can be implemented. Avoid the spring rush and get those firebreaks ready to go now. Fall disked firelines will be ready for the burn in the spring. The late summer and fall is a great time to conduct prescribed burns on native stands. You can burn native grass CRP from July 16-March 15. Results from late season burns *prior* to native dormancy suggest that burning can stimulate dramatic flushes of forbs in grass-dominated stands. This provides a great way to add large areas of brood rearing cover the next spring and diversifies future nesting cover. Try a summer or fall burn on part of your native plantings and you'll be amazed at the results. Be sure to visit your local Farm Service Agency office before starting any management on your CRP acres to make sure it's included in your conservation plan.

For hunters, fall is a wonderful season full of colorful leaves, cooler temps and anticipation of opening days. Just don't let the manager in you forget that fall is the best time to do much of your upland management. Think like a squirrel and take some time this fall to prepare!

Volunteers Needed for Fall Whistle Count Surveys!

In October, Department biologists will head to the field before sunrise to listen for bobwhites, but not for the familiar "bob-bob-white" whistle we all relish hearing in the spring and summer. What they want to hear is "koi-lee... koi-lee."

During the fall, coveys will often call to each other right before sunrise. Bluebird mornings with little or no wind are usually the best. The calling only lasts for a few minutes, but during that time there's usually an outbreak of whistling from all the different coveys in the area. The more coveys in the area, the more whistling there will be. Department biologists will be conducting predawn whistle counts during the month of October on the Department's 19 Quail Emphasis Areas to determine preseason population densities and the effectiveness of past management practices.

Since 2005, biologists have been conducting fall whistle counts and spring songbird surveys on the Quail Emphasis Areas to track bobwhite and songbird trends on these 19 intensively managed conservation areas. Biologists and private landowners are also conducting fall whistle counts on private farms and within Quail Focus Areas to determine the effectiveness of past habitat work. To learn more about fall whistle counts visit http://www.mdc.mo.gov/landown/wild/quail/fallcount.htm.

This year, area managers are asking for volunteers to help with either fall whistle counts or with locating coveys after the calling period. After the calling period, biologists attempt to flush the birds to determine the size of the covey. Assisting with the survey is an excellent way to learn more about quail habitat management and a great way to get your dogs into birds before the season. If interested in volunteering, please be aware that you will need to arrive at the conservation area at least one hour before sunrise and additional training may be required if you plan to assist with the actual surveys. **If interested, call Aaron Jeffries at 573-522-4115 x 3146 or email at Aaron.Jeffries@mdc.mo.gov.**

Quail Unlimited Habitat and Equipment Demonstration Day Aug. 29th

This all day habitat and equipment demonstration day will take place at Derr Equipment, 11001 Hwy 71 Savannah, MO 64485. Take I-29N from St. Joseph to 71N via Exit 56A, travel approximately 5 miles to Exit N59/Business 71. Derr Equipment is located on the north side of the road. The event takes place from 10AM to 8PM. Come see Kabota, Land Pride, Echo, and many other equipment demonstrations throughout the day. Try this equipment out that will assist you in making your farm better for quail. See quail management techniques like prescribed burning, edge feathering, herbicide strips, etc. Classroom style upland game presentations will occur during the afternoon. **A light lunch and BBQ dinner/live auction is provided with paid RSVP.** Contact Nick Prough at 816-365-0318, or e-mail nprough@qu.org. Visit www.qu.org for more details about this event.

Fall Covey Headquarters Calendar

September
Till firebreaks and new food plots prior to onset of wet weather
Seed wheat, barley, or rye into tilled firebreaks and food plots
Burn native grasses to encourage wildflowers and set back rank grass

October
Conduct quail covey call census 45 minutes before sunrise on clear calm mornings
Spray native grass plantings for invading fescue and brome after a killing frost
Most USDA Conservation Programs will announce new signups after Oct. 1
Eliminate fescue and brome from shrub thickets, woody draws, and fencelines after leaf drop

November
Start your edge feathering operations – make new homes for quail
Prepare ground for shrub plantings
Order tree and shrub seedlings from the MDC nursery – www.mdc.mo.gov
Basal spray undesirable trees according to herbicide label now through March

UNIVERSITY OF MISSOURI Extension

NRCS Natural Resources Conservation Service

The Covey Headquarters Newsletter
3915 Oakland Ave
St. Joseph, MO 64506

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